

## PAIR AND SINGLE MID-WATER TRAWL HAUL LOG

This log contains detailed questions about the setting and hauling of gear, and the haul's catch. Complete a new log after each hauling of gear. If you feel that you cannot go on deck for weather related safety reasons, record as much information on this log as possible (*i.e.* Header Information, weather, depths, times, positions, *etc.*).

If the gear is set, and only partially hauled back, include the time spent hauling and resetting the net in this haul's time. Record END TIME (#4) when the hauling equipment is put into gear and legs are fully retrieved and aboard the vessel.

The species summary section of this log should be used to record catches of herring, mackerel, debris, shells and various other fish species. Species caught that should not be recorded on this particular log include: pelagic species (*i.e.* swordfish, billfish, tuna, bonito, sharks, *etc.*), sturgeons, rays or tagged fish. Those species must be recorded on an Individual Animal Log. This Pair and Single Mid-Water Trawl Haul Log will serve as a cover sheet for any Length Frequency Log(s), Individual Animal Log(s), Crustacean Sample Log(s), and/or Catch Composition Log(s) corresponding to this haul. All marine mammals, sea turtles, and sea birds caught in the gear must be recorded on a Marine Mammal, Sea Turtle, and Sea Bird Incidental Take Log. See Appendix R. Species List and Corresponding Logs for a list of species and the log(s) on which to record them.

In the **pair trawl fishery**, if only one of the two vessels has an observer onboard, the observer should be recording the catch for both vessels (Disposition 110 should be used for the part of the catch that is pumped/transferred to other vessel). If both vessels have an observer onboard, the observer onboard the vessel where the catch is pumped onto should be observing and recording all of the catch. The observer onboard the other vessel should comment that "catch was loaded onto the other vessel" and leave the species section BLANK.

If catch is dumped before coming onboard, the haul should be marked as unobserved and all visually observed discards should be noted in the species section of the haul log. Be sure to **clearly** document the situation in the comments section.

If there are insufficient lines on one form for all

species caught in this haul, continue listing species on an additional Pair and Single Mid-Water Trawl Haul Log making sure to complete all of the Header Information (A-C), GEAR CODE (D), GEAR NUMBER (1) and HAUL NUMBER (E).

If information is unavailable or unknown for any question except a "No/Yes" question, record a dash (-) in the field. If the answer to a "No/Yes" question is unknown, record a "9" on the line next to the code for "No" to indicate that a field was not skipped, but the answer is unknown. If a field relates to a question to which you previously answered "No", leave the field blank.

Become familiar with the following definitions:

### DEFINITIONS

#### **PAIR TRAWL FISHERY - Observer on vessel that deployed net.**

Haul Begin: First component of net deployed, *i.e.* net hits the water and cable (wire) begins to be paid out.

Haul End: Net retrieved to the surface, *i.e.* legs retrieved and aboard both vessels.

#### **PAIR TRAWL FISHERY - Observer NOT on vessel that deployed net.**

Haul Begin: When the warp (towing cable) is passed to their vessel.

Haul End: Net retrieved to the surface, *i.e.* legs retrieved and aboard both vessels.

**NOTE:** In the pair trawl fishery the cables (wires) and net are usually hauled back alternating between vessels throughout the trip. The observer is expected to observe all the hauls occurring on the vessel to which he/she is deployed.

#### **SINGLE MID-WATER TRAWL FISHERY**

Haul Begin: First component of net deployed, *i.e.* net hits the water and cable (wire) begins to be paid out.

Haul End: When the hauling equipment is put into gear.

### INSTRUCTIONS

For instructions on completing fields A-W, refer to

the Common Haul Log Data section of the NEFSC Observer Program Manual.

**1. GEAR NUMBER:** Record the gear number used for this haul as uniquely identified on the appropriate Pair and Single Mid-Water Trawl Gear Characteristics Log(s).

**2. GEAR CONDITION:** Indicate the condition of the gear at haulback, even if this was the condition of the gear when set, by recording the most appropriate two digit code listed below, and in Appendix J. Gear Condition Codes:

- 000 = Unknown.
- 010 = No gear damage, or very few small, scattered holes.
- 020 = Wings twisted or torn, not exceeding 50% of meshes.
- 030 = Wings twisted or torn, exceeding 50% of meshes.
- 040 = Square and/or bosom torn, not exceeding 50% of meshes.
- 050 = Square and/or bosom torn, exceeding 50% of meshes.
- 060 = Belly torn, not exceeding 25% of meshes.
- 070 = Belly torn, exceeding 25% of meshes.
- 080 = Codend and/or extension piece torn, not exceeding 10% of meshes.
- 090 = Codend and/or extension piece torn, exceeding 10% of meshes.
- 100 = Hang-up, causing gear to be hauled back before scheduled time; minor damage.
- 110 = Parted legs, sweep, or headrope.
- 120 = Tear up exceeding gear condition of code 02, but not total net destruction.
- 130 = Obstruction in the gear, such as a large amount of fixed gear, boulders, *etc.*
- 140 = Crossed doors.
- 150 = Open codend.
- 160 = Major hang-up, tear-up, or loss of gear.
- 170 = Grate clogged with fish or debris.
- 990 = Other, specify in COMMENTS.

**3. BEGIN/END DATE:** Record the month, day, and year, based on local time, that this haul began and ended

**4. BEGIN/END TIME:** Record the local time, using the 24 hour clock (0000-2359), that this haul began and ended.

### **Single Mid-Water Trawl Fishery:**

Haul begin is when the net is deployed, *i.e.* when the net hits the water and the cable begins to be paid out. Haul End is when the hauling equipment is put into gear.

### **Pair Trawl Fishery:**

Observer on vessel that deployed net - Haul Begin is when the net is deployed, *i.e.* when the net hits the water and the cable begins to be paid out. Haul End is when the net is retrieved to the surface, *i.e.* when the legs are retrieved and aboard both vessels.

Observer NOT on vessel that deployed net - Haul Begin is when when the warp (towing cable) is passed to their vessel. Haul End is when the net is retrieved to the surface, *i.e.* when the legs are retrieved and aboard both vessels.

**5. NUMBER OF TURNS:** Record the number of significant turns the vessel makes during this haul *i.e.*, greater than 90 degrees. This information may be obtained from the Captain.

**NOTE:** This field should be filled out for both observed and unobserved hauls.

**NOTE:** If no turns are made during this haul, record a zero.

**NOTE:** If the number of turns is unknown, record a dash.

**6. TOW SPEED:** Record, to the nearest tenth of a knot, the average towing speed, over the bottom, for this haul.

**7. WIRE OUT:** Record, in whole fathoms, the amount of wire paid out for this haul. This measurement is taken from the towing blocks to the trawl doors. This information may be obtained from the captain.

**8. HAUL END WATER TEMPERATURE:** Record, to the nearest tenth of a degree Fahrenheit, the surface water temperature when this haul **ended**.

**NOTE:** If this temperatures is obtained in Celsius, use Appendix Q. Conversion Tables to convert it to Fahrenheit.

**NOTE:** Use a "ScoopMaster" thermometer to obtain this temperature.

**NOTE:** If an incidental take occurs in this haul, a HAUL END WATER TEMPERATURE **must** be recorded.

**9. DATE/TIME FISHING BEGINS:** Record the local date (month, day, and year) and time, using the 24 hour clock (0000-2359), that the gear is fully deployed and actively fishing (this may be when the brakes are put on).

**10. DATE/TIME GEAR ONBOARD:** Record the local date (month, day, and year) and time, using the 24 hour clock (0000-2359), that the gear from this haul is completely out of the water.

### OPENING OF NET

**NOTE:** The following 3 fields, VERTICAL OPENING (#11), HORIZONTAL OPENING (#12), and DOOR SPREAD (#13), should only be filled out if Gear Mounted Electronics are used.

**11. VERTICAL OPENING:** Record, in whole feet, the average distance from the top of the mouth to the bottom of the mouth while the net is fishing. This information may be obtained from the Captain.

**12. HORIZONTAL OPENING:** Record, in whole feet, the average width of the mouth of the net, from wing tip to wing tip, while the net is fishing. This information may be obtained from the Captain.

**13. DOOR SPREAD:** Record, in whole feet, the average distance from the door on one side of the net to the door on the other side of the net while the net is fishing. This information may be obtained from the Captain.

**NOTE:** If there are no doors on the gear, dash this field.

**14. DEPTH RANGE, HEADROPE:** Record, in whole fathoms, the range of depths (shallowest to deepest), from the surface, the headrope fished for this haul. This information should be obtained from the captain or the transducer screen/printout.

**15. DISTANCE RANGE BETWEEN BOATS:** Record, in whole feet, the range of distances (shortest to longest) between the two boats while fishing. This information should be obtained from the captain.

**NOTE:** This information should be recorded when the gear begins to be towed (shortest distance) and the towing has ended (longest distance).

**NOTE:** This should only be filled out for pair trawl trips.

### FISH PUMPING

**16. BEGIN/END DATE:** Record the month, day, and year, based on local time, that the fish pumping began and ended.

**17. BEGIN/END TIME:** Record the local time, using the 24 hour clock (0000-2359), that the fish pumping began and ended, *i.e.*, when the fish pump is attached to codend and is initially turned on (fish pump begin) and when the fish pump is turned off and fish are no longer coming out of the dewatering box (fish pump end).

**18. CAPTAIN'S CATCH ESTIMATE:** Record, in whole pounds, the Captain's catch estimate of the total catch prior to pumping the catch onboard. This value will aid in determining the time increments when obtaining a subsample.

**19. CODEND?:** Record whether the codend was visible at the completion of the pumping process by placing an "X" next to the appropriate code:

- 0 = No.
- 1 = Yes.

**20. FISH PRESENT?:** Record whether there were fish present in the net at the completion of the pumping process by placing an "X" next to the appropriate code:

- 0 = No.
- 1 = Yes.
- 2 = Could Not See.

**21. LOCATION OF CODEND:** Record the location of the net when the remainder of the catch was emptied at the completion of the pumping process by placing an "X" next to the appropriate code:

- 1 = Off Stern.
- 2 = Side of Vessel.
- 3 = On Deck.

### COMMENTS

Record any additional information regarding this haul, *i.e.* unusual species caught, uncommon catches, tear-ups, reason to expect the gear was not fishing properly, *etc.* If turns were made during the haul, note whether the doors were left in the water (both, starboard, or port). If more room is needed, use the back of this log, making sure to write "See Back" on the front of the log. Reference each comment with its corresponding field name.